



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,217	10/22/2001	Senthil Sengodan	550.76USC1	5156

32294 7590 09/09/2005

SQUIRE, SANDERS & DEMPSEY L.L.P.  
14TH FLOOR  
8000 TOWERS CRESCENT  
TYSONS CORNER, VA 22182

EXAMINER

HYUN, SOON D

ART UNIT PAPER NUMBER

2661

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/014,217

Applicant(s)

SENGODAN, SENTHIL

Examiner

Soon D. Hyun

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/22/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SOON HYUN**  
**PATENT EXAMINER**

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date Oct. 22/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 13, 22, and 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 5, and 7 of U.S. Patent No. 6,426,945. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 3, 5, and 7 of U.S. Patent No. 6,426,945, respectively contains every element of claims 1, 3, 22, and 34 of the instant

application, respectively.

“A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). “ ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (Decided: May 30, 2001).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wesley et al (U.S. Patent No. 6,104,695).

Regarding claim 1, Wesley et al (Wesley) discloses a method of providing resource (a repair TTL) discovery comprising:

sending a first request message (a first control message 36, col. 5, lines 10-14)  
having a first selected scope (a first repair TTL) by a repair head destination device 12;

analyzing whether a confirm message (a feedback message 38, col. 5, lines 48-52) is received in response to the first request message;

sending a second request message (a second control message) having a second selected scope (a second repair TTL incremented by a predetermined value to the first repair TTL, col. 5, lines 52-56), the second scope being greater than the first scope, i.e., the second repair TTL is greater than the first repair TTL.

However, Wesley differs from the present application in that Wesley sends the second control message when the feedback message in response to the first control message is received by the sender, while the present application sends the second message when a confirm message in response to the first message is not received by the sender.

It would have been obvious to one having ordinary skill in the art to change the scheme of the feedback message indicating no receiving for Wesley to a scheme such that a receiver sends an ACK message to a sender when the control message is received by the receiver, if no unexpected results can be seen from the use of the changed scheme.

Regarding claim 5, Wesley further discloses that the repair head destination device 12 multicast control message 36 to known multicast group 14, 16, 18 col. 5, lines 10-12).

Regarding claim 6, Wesley further discloses that the scope in the control message comprises a hop count, the hop count representing a number of nodes in a multicast tree that the control message propagates (col. 5, lines 14-20).

Regarding claim 7, Wesley further discloses that the hop count is decremented at a node in the multicast tree receiving the control message and forwarding the control message to a next node in the multicast tree (col. 5, lines 16-22).

Regarding claim 8, Wesley further discloses that the control message comprises parameter (a dispatch TTL value and an IP TTL value) for analyzes by a node receiving the control message (col. 5, lines 21-29).

Regarding claim 9, Wesley further discloses that the parameter further comprises hop-by-hop parameters (IP TTL value), the hop-by-hop parameters being modified (decremented) by intermediate nodes during the propagation of the control message in the multicast group (col. 5, lines 16-22).

Regarding claim 10, Wesley further discloses that the parameters (the dispatch TTL value and the IP TTL value) further comprises destination parameters (the dispatch value and modified IP value) being used by a standard destination device being discovered using the control message to determine whether the standard destination device responds a confirm message (a computed result from the TTL values, col. 5, lines 23-29).

Regarding claim 11, refer to the discussion for claims 5-9. Wesley further discloses that a standard destination device examines destination parameters (the dispatch TTL value and the IP TTL value) in the control message and unicasting a response message (a computed result from the TTL values) to the control message (col. 5, lines 23-29).

Regarding claim 22, refer to the discussion for claim 1. Wesley does not explicitly teach a computer program or software for executing the method. It would have been obvious to one having ordinary skill in the art to incorporate a computer program for the method to take advantage of using the programmable computer program.

Regarding claim 26, refer to the discussion for claim 5.

Regarding claim 27, refer to the discussion for claim 6.

Regarding claim 28, refer to the discussion for claim 7.

Regarding claim 29, refer to the discussion for claim 8

Regarding claim 30, refer to the discussion for claim 9.

Regarding claim 31, refer to the discussion for claim 10.

Regarding claim 32, refer to the discussion for claim 11.

Regarding claim 34, refer to the discussion for claims 1 and 26, a discovery unit, an application (a computer program of claim 26), and an endpoint application are equivalent to the repair head destination device (12), and the standard destination device (14), respectively. See col. 4, lines 26-34 and FIG. 1.

Regarding claim 38, refer to the discussion for claim 6.

Regarding claim 39, refer to the discussion for claim 8.

Regarding claim 40, refer to the discussion for claim 9.

Regarding claim 41, refer to the discussion for claim 10.

Regarding claim 42 and 43, Wesley does not explicitly teach whether the repair head destination device (12) and the computer program are co-located or not.

It would have been obvious to one having ordinary skill in the art to locate the computer program such that a processor in the repair head destination device (12) can read the program, if no unexpected results can be seen from locations of the program.

Regarding claim 44, Wesley further teaches that the device could be any networkable electronic device (col. 3, lines 59-63). Therefore, the repair head destination device (12) could be a mobile switching center.

Regarding claim 45, it would have been obvious to one having ordinary skill in the art the computer program is stored in the mobile (portable) device.

#### ***Allowable Subject Matter***

5. Claim 13-21 would be allowable if the double patenting is overcome.

Claims 2-4, 23-25, and 35-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and the double patenting is overcome

6. The following is a statement of reasons for the indication of allowable subject matter.

The prior art of record fails to teach the step of terminating the resource discovery procedure when a confirm message is received prior to the expiration of the timer in combination with other elements recited in claims 2, 23, and 35.



The prior art of record fails to teach the step of endpoint locating when a confirm message is received prior to the expiration of the timer in combination with other elements recited in claim 13.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon D. Hyun whose telephone number is 571-272-3121. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
S. Hyun  
09/02/2005